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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/082,874	02/26/2002	Tomas Diez	02-171	4966

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GEORGE A. COURY
BACHMAN & LaPOINTE, P.C.
Suite 1201
900 Chapel Street
New Haven, CT 06510-2802

EXAMINER

VO, HUYEN X

ART UNIT PAPER NUMBER

2655

DATE MAILED: 07/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/082,874	Applicant(s) DIEZ ET AL.	
	Examiner Huyen X. Vo	Art Unit 2655	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 May 2005.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-25 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 26 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant has submitted a response filed 5/26/2005 arguing to traverse the art rejection based on an argument regarding *"the recognition by the present inventors that the voice receiving member needs to be outside the noise zone of the air conditioner"* (see *remarks/arguments* section page 7-9). Applicant's arguments have been fully considered but they are not persuasive. Both Bush et al. (US 6397186) and Geilhufe et al. (US 6584439) teach remote control of voice-controlled device via wireless or wired means. Bush et al. teach a method/device for remotely controlling another device via wireless communication using spoken commands (see *Bush et al. reference*). Geilhufe et al. teach that voice controlled devices "may optionally" include a communications interface for providing "remote control" of voice-controlled device via wireless or wired means (*col. 11, lines 61-67*), wherein the device being controlled is a HVAC (*col. 12, lines 33-62*). Furthermore, it would have been obvious to one of ordinary skill in the art at the time of invention to readily recognize that by placing the voice receiving device at a remote location out of the noise zone would improve speech recognition accuracy. Therefore, previous ground of rejection is maintained.

2. Applicant also introduces two additional claims 24-25 containing subject matters that require further consideration and/or search. Therefore, claims 24-25 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bush et al. (US 6397186) in view of Geilhufe et al. (US 6584439).

5. Regarding claim 1, Bush et al. disclose a control system for a home appliance, comprising: a remote command receiver for receiving instructions for said home appliance (*col. 8, lines 1-62, inherently included in the controlled appliance*); and a control module, comprising: a speech receiving member for receiving speech commands (*element 20 in figure 2a*); and a converter for converting said speech commands to home appliance instructions (*col. 8, lines 1-16 or referring to figure 10*); wherein said control module is communicated with said remote command receiver for conveying said home appliance instructions from said control module to said remote command receiver (*col. 8, lines 1-62*). Bush et al. fail to specifically disclose that the home appliance is a HVAC system. However, Geilhufe et al teach that the home appliance is a HVAC system (*col. 12, lines 33-62*).

Since Bush et al. and Geilhufe et al. are analogous art because they are from the same field of endeavors it would have been obvious to one of ordinary skill in the art at

the time of invention to modify Bush et al. by incorporating the teaching of Geilhufe et al. in order to provide the user conveniences in controlling HVAC system using voice.

6. Regarding claim 15, Bush et al. disclose a control module for controlling a home appliance, comprising: a speech receiving member for receiving speech commands (*element 20 in figure 2a*); a converter for converting said speech commands to home appliance instructions (*col. 8, lines 1-16 or referring to figure 10*); and a transmitter for transmitting said home appliance instructions to said home appliance (*col. 8, lines 1-62*). However, Geilhufe et al teach that the home appliance is a HVAC system (*col. 12, lines 33-62*).

Since Bush et al. and Geilhufe et al. are analogous art because they are from the same field of endeavors it would have been obvious to one of ordinary skill in the art at the time of invention to modify Bush et al. by incorporating the teaching of Geilhufe et al. in order to provide the user conveniences in controlling HVAC system using voice.

7. Regarding claims 2-6 and 16-18, Bush et al. further disclose that the control module further comprises a transmitter for transmitting controlled instructions to said remote command receiver (*col. 8, lines 1-62*), wherein said transmitter is a wireless transmitter, and said remote command receiver is a wireless receiver (*col. 8, lines 1-62*), wherein said transmitter and said remote command receiver are communicated by wireless communication selected from the group consisting of light-based

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communication (*col. 8, lines 1-62*), wherein said transmitter and said remote command receiver are communicated by infrared communications (*col. 8, lines 1-62*).

8. Regarding claims 7-9 and 19-21, Bush et al. further disclose the system of claim 1, wherein said control module further comprises an indicator member for identifying a received speech command (*col. 9, lines 1-6 or referring to indicators 52 and speaker 53 in figure 2a*), and wherein said control module further comprises a storage member for storing known speech patterns and corresponding indicators (*col. 31, lines 1-18 or Memory 61-62 and 66 in figure 2a*), and wherein said control module is adapted to compare said received speech command with said known speech patterns and to output an indicator corresponding to said received speech command (*col. 31, line 19 to col. 32, line 9 or fig. 12b*), and wherein said indicator member is a speech simulator and said corresponding indicators are signals for generating speech (*col. 31, lines 54-67*).

9. Regarding claims 10 and 22, Bush et al. further disclose that the storage member also stores commands for generating the home appliance instructions corresponding to said known speech patterns whereby said control module acknowledges said received speech command and transmits corresponding the home appliance instructions (*figures 10-11 and/or RAM and ROM in figure 2a*).

10. Regarding claims 11 and 23, Bush et al. further disclose that the control module further comprises a neural network adapted to train said control module for receiving

personalized speech commands, and a storage member for storing personalized speech data and corresponding home appliance instructions (*col. 10, line 47 to col. 11, line 7*).

11. Regarding claims 12-14, Bush et al. further disclose the system according to claim 1, wherein said control module further comprises a base member adapted for supporting said module on a flat surface (*figure 3*), wherein said control module further comprises a plug member for connecting to an AC power source and an AC-DC transformer for supplying DC power to said control module (*col. 9, lines 13-19*), and wherein the speech receiving member comprises a multi-directional microphone (*col. 7, lines 33-52*).

12. Regarding claim 24, Bush et al. further teach a speech recognition system together with a receiving member located at a remote location away from the device being controlled (in this case TV or other appliance devices). Geilhufe et al. teach that the other appliance devices can be an HVAC (*see claim 1*). Both Bush et al. and Geilhufe et al. fail to specifically teach the heating, ventilation or air conditioning system includes an HVAC component which generates a noise zone wherein operating noise of said component is greater than 60 dB A. However, examiner takes official notice that HVAC system generally generates a noise zone greater than 60 dB A. The advantage of placing the control module away from the HVAC system is to prevent noise from corrupting input speech commands to improve speech recognition accuracy.

13. Regarding claim 25, Bush et al. further disclose a method for operating a system according to claim 1 to control a heating, ventilating or air conditioning (HVAC) component, comprising the steps of: positioning said control module outside said noise zone; receiving a speech command at said control module (*see claim 1, speech recognizer is located in a remote control that wirelessly communicates with the controlled devices*); converting said speech command to system instructions at said control module (*remote device, see above*); and sending said system instructions from said control module to said component (*see claim rejection above*). Bush et al. fail to specifically disclose that the device being controlled is a HVAC system. However, Geilhufe et al. teach that the device being controlled is a HVAC system (*col. 12, lines 33-62*).

Since Bush et al. and Geilhufe et al. are analogous art because they are from the same field of endeavors it would have been obvious to one of ordinary skill in the art at the time of invention to modify Bush et al. by incorporating the teaching of Geilhufe et al. in order to provide the user conveniences in controlling HVAC system using voice.

The modified Bush et al. fail to specifically disclose the step of providing said heating, ventilation or air conditioning component which generates a noise zone wherein operating noise of said component is greater than 60 dB A. However, examiner takes official notice that HVAC system generally generates a noise zone greater than 60 dB A. The advantage of placing the control module away from the

HVAC system is to prevent noise from corrupting input speech commands to improve speech recognition accuracy.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Huyen X. Vo whose telephone number is 571-272-7631. The examiner can normally be reached on M-F, 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wayne Young can be reached on 571-272-7582. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

HXV

7/12/2005


SUSAN MCFADDEN
PRIMARY EXAMINER